



OIPE

ENTERED

## RAW SEQUENCE LISTING

DATE: 03/20/2002

PATENT APPLICATION: US/10/091,281

TIME: 16:27:42

Input Set : A:\13587\_338.txt

Output Set: N:\CRF3\03202002\J091281.raw

3 <110> APPLICANT: RAYMOND, VINCENT  
4 SI, ERWIN  
5 MORISETTE, JEAN  
7 <120> TITLE OF INVENTION: OPTINEURIN NUCLEIC ACID MOLECULES AND USES THEREOF  
9 <130> FILE REFERENCE: 13587.338  
C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/091,281  
C--> 11 <141> CURRENT FILING DATE: 2002-03-06  
11 <160> NUMBER OF SEQ ID NOS: 463  
13 <170> SOFTWARE: PatentIn Ver. 2.1  
15 <210> SEQ ID NO: 1  
16 <211> LENGTH: 5054  
17 <212> TYPE: DNA  
18 <213> ORGANISM: Homo sapiens  
20 <220> FEATURE:  
21 <221> NAME/KEY: allele  
22 <222> LOCATION: 391  
23 <223> OTHER INFORMATION: single nucleotide polymorphism (SNP)  
25 <220> FEATURE:  
26 <221> NAME/KEY: allele  
27 <222> LOCATION: 691  
28 <223> OTHER INFORMATION: single nucleotide polymorphism (SNP)  
30 <220> FEATURE:  
31 <221> NAME/KEY: allele  
32 <222> LOCATION: 709  
33 <223> OTHER INFORMATION: single nucleotide polymorphism (SNP)  
35 <220> FEATURE:  
36 <221> NAME/KEY: allele  
37 <222> LOCATION: 887  
38 <223> OTHER INFORMATION: single nucleotide polymorphism (SNP)  
40 <220> FEATURE:  
41 <221> NAME/KEY: allele  
42 <222> LOCATION: 894  
43 <223> OTHER INFORMATION: single nucleotide polymorphism (SNP)  
45 <220> FEATURE:  
46 <221> NAME/KEY: allele  
47 <222> LOCATION: 987  
48 <223> OTHER INFORMATION: single nucleotide polymorphism (SNP)  
50 <220> FEATURE:  
51 <221> NAME/KEY: allele  
52 <222> LOCATION: 1112  
53 <223> OTHER INFORMATION: single nucleotide polymorphism (SNP)  
55 <220> FEATURE:  
56 <221> NAME/KEY: allele

## RAW SEQUENCE LISTING

DATE: 03/20/2002

PATENT APPLICATION: US/10/091,281

TIME: 16:27:42

Input Set : A:\13587\_338.txt

Output Set: N:\CRF3\03202002\J091281.raw

57 <222> LOCATION: 1505  
58 <223> OTHER INFORMATION: insertion of additional c residue  
60 <220> FEATURE:  
61 <221> NAME/KEY: allele  
62 <222> LOCATION: 1606  
63 <223> OTHER INFORMATION: single nucleotide polymorphism (SNP)  
65 <220> FEATURE:  
66 <221> NAME/KEY: allele  
67 <222> LOCATION: 2405  
68 <223> OTHER INFORMATION: single nucleotide polymorphism (SNP)  
70 <220> FEATURE:  
71 <221> NAME/KEY: allele  
72 <222> LOCATION: 2606  
73 <223> OTHER INFORMATION: single nucleotide polymorphism (SNP)  
75 <220> FEATURE:  
76 <221> NAME/KEY: allele  
77 <222> LOCATION: 3313  
78 <223> OTHER INFORMATION: single nucleotide polymorphism (SNP)  
80 <220> FEATURE:  
81 <221> NAME/KEY: allele  
82 <222> LOCATION: 3555  
83 <223> OTHER INFORMATION: insertion of additional t residue  
85 <220> FEATURE:  
86 <221> NAME/KEY: allele  
87 <222> LOCATION: 3625  
88 <223> OTHER INFORMATION: single nucleotide polymorphism (SNP)  
90 <220> FEATURE:  
91 <221> NAME/KEY: allele  
92 <222> LOCATION: 3629  
93 <223> OTHER INFORMATION: single nucleotide polymorphism (SNP)  
95 <220> FEATURE:  
96 <221> NAME/KEY: allele  
97 <222> LOCATION: 3882  
98 <223> OTHER INFORMATION: insertion of additional t residue  
100 <220> FEATURE:  
101 <221> NAME/KEY: allele  
102 <222> LOCATION: 3988  
103 <223> OTHER INFORMATION: single nucleotide polymorphism (SNP)  
105 <220> FEATURE:  
106 <221> NAME/KEY: allele  
107 <222> LOCATION: 4452  
108 <223> OTHER INFORMATION: single nucleotide polymorphism (SNP)  
110 <220> FEATURE:  
111 <221> NAME/KEY: repeat\_region  
112 <222> LOCATION: 598..878  
113 <223> OTHER INFORMATION: repeat element  
115 <220> FEATURE:  
116 <221> NAME/KEY: repeat\_region  
117 <222> LOCATION: 938..957

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/091,281

DATE: 03/20/2002  
TIME: 16:27:42

Input Set : A:\13587\_338.txt  
Output Set: N:\CRF3\03202002\J091281.raw

```

118 <223> OTHER INFORMATION: Short repeat element
120 <220> FEATURE:
121 <221> NAME/KEY: repeat_region
122 <222> LOCATION: 1002..1329
123 <223> OTHER INFORMATION: ALU repeat element
125 <220> FEATURE:
126 <221> NAME/KEY: repeat_region
127 <222> LOCATION: 2288..2587
128 <223> OTHER INFORMATION: ALU repeat element
130 <220> FEATURE:
131 <221> NAME/KEY: misc_feature
132 <222> LOCATION: 5054
133 <223> OTHER INFORMATION: putative transcription start site
136 <400> SEQUENCE: 1
137 gtacacctag aagtgggaatt gctggggtcat atcataactc tctgtttaac tttccaagga 60
139 actcatcctc ggaatatattg gaaccagtga tgaactgaat caaactaaag ctgagacaaa 120
141 gtccagacca aggtcaacca tagggcagat gattcatgca gcgaccacac cagtggcctc 180
143 acaggagcag gggcacaccc tttgctgcag cagtcccaa catttttgac accaggaact 240
145 ggtttcatgg aagacaattt ttccatggat ggtgggtggg ggggggggtg ttttgggatg 300
147 aaatgggtcc acctcagatc atcaggcatt agagtctcat aagaagcacg caacctagat 360
149 cccttgcatg ttctgttgac aatagggttc acgtcctat gaaaatctaa tgcagctgct 420
151 gatctgacaa gaggcggagc ttaggccata atgtcaccc acccgttgct cacctcctgc 480
153 tgttcggctc agttcctgag aggccacagg ccagtactgg ttcaccaccc ggggtttggg 540
155 gacccctgct ttattggaca taattattag gtctgtttct ttttgggtgg gtttgtacag 600
157 ctctattgag gtataatcca catgccataa aattcacccc atttgtaaat gtatgattca 660
159 tggctttcaa ttacacttaa aaagttgtaa aaccatcatt acaattcaaa tttagtatat 720
161 ttccatcatc ccccaaaaat cccctcgagt tcctttgcag ttcaaagcca cccccaattt 780
163 caggcaacta ctggctctgat ttctgtcttt ttctactttc cttttctgga catttaagt 840
165 atatggagtc atagcatatg tagtctttgg catctgggg agcaagtacg aatattagtc 900
167 taccacctca gatgcacata aaaatattac atatctttt ttttcttttc cttccttctc 960
169 tccttccctc cttcctttct ctctctactt ccttcccttc ctccttctta cttttcttcc 1020
171 ttctctctct ctctctcttt ctttttgagc agagtctcac tccatggccc aggctggagt 1080
173 gcagtggcac catcttggtc cagcgcaacc tttgactccc aggetcaagc aattctcctg 1140
175 cctcagcctc tcaagtagct gagattacag gcacgcacca ctactgcctg gctaattttt 1200
177 atatttttag tagagatagg gtttcaccat gttagccagg ctggtcttga actcctgacc 1260
179 tcaaacgata ctcccaaagt gctgggatta caggcgtgag ccaccgccct gggcctcttt 1320
181 actttcttta aaccagttc tgcagggttg tacggaaacc tattttcggg caccactggg 1380
183 gtctggagag gggaggtctc cttccctacg gccatgcaaa actccaggag ggcttttggt 1440
185 acccattgaa gtaaggcca tttatttttc agcccagcaa cattgccact gataccctca 1500
187 ttatcaaata gttcttctag ggaacagtct ctgctgtttc caatgacaag cctgggcagc 1560
189 agaactctgc ggaggttccc aaagtccagt aggtgcatcc caagagcttg ctgtctgtct 1620
191 ggggtgctga gggactgagg cttgagtcct tgatgtctat aagaccacca tcccactcct 1680
193 cctcccaatc tgggggcggg ggagtcactc ctccctccaa ctgttggtgaa agcctccacc 1740
195 ccaccagctc ctggctcttc ctccaggaca tctggggtag atcatggatg tattgagatc 1800
197 aggttttctc aaaagacaag aagaaaggct gtacttctaa gagctgttgc caggagtcca 1860
199 gccaacgctc ctgaaggtag gaagccaaa gggactcggt gctaactcca aacagaggag 1920
201 attgggggtg aaagggaaca caaggaacat caaaccaga ttaggatctc actaaaaacc 1980
203 ttccacactc gctctacatt taccaccacat aaaaccacat caacaaatca gctaagagca 2040
205 tgctattatt tcagtttttt cgctgcattt agattccatc taccatgga agtgtgcagg 2100

```

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/091,281

DATE: 03/20/2002  
TIME: 16:27:42

Input Set : A:\13587\_338.txt  
Output Set: N:\CRF3\03202002\J091281.raw

```

207 aagatggagt caccaaacgg gatgatccag gctaagaaac agaaccggct ctaacacaag 2160
209 caacagcaac aaacacccatg agccaggcgt tcttctaggt gttgaagaag tatttcctct 2220
211 ttaatcttct cagcatcctt aggtgagggc tgtgggtcca gaggccttat ctaaaatttt 2280
213 tgggtggctg ggcaccgtgg ctacacatg taatcccagc actttggaag gccgaggcag 2340
215 gtggatcacc cgaggtcagg agttcaatac caggctggtc aacatggcga aacctcatca 2400
217 atacgaaaaa tgcaaaaatt agcttgggtg ggtggcacac gcctgtaatc ccagccactt 2460
219 gggaggctga ggcaggagaa tcaactcaaac ccaggagggt gagattgcag tgagctgaga 2520
221 ttatgccact gcactccagc ctgggcaaca gagtgaagct ccacctcaa aaataaaata 2580
223 aaacctttgg ggcaagctct gcttttagagt ccagaattct ggggattttc aaaaggctat 2640
225 tcaataaatg ggatttatat cacataacac cctgacactg tctgacgcag ttctcctatc 2700
227 aactattcga ttttccttca caaaacaaat ttaaaaatca catcaaggga tctaaataaa 2760
229 gactgtaaat agctttccat cagttgggtc tggtcagaaa agaggtttgg tccttagaac 2820
231 tttctggatt tgggagtga ctatactcc cattttacag ataaaggga tgaggaagg 2880
233 taagatgaag taacttggtc aaggctctac agctaagaag tggttgtcgg gggagtgtgt 2940
235 gtgcatgtgt gtgtgcagt gtgcaggga ccccccacc cgacccacc actgagagca 3000
237 aggaatcagg agaaaacaac tttgactgct ttctgtacca gaaactcacc tcgagcctcc 3060
239 cacaccaag ccatgggcag cttgtgggtg accttcttct cttggctctg agtttactg 3120
241 atgctcattt taattcactt tcatagtgtt gttttgttct cgtttttgtt tttgcttgag 3180
243 acaaagtctc cctctcacc aagctggagt gcagtgtgc aatcacagct cattgcagcc 3240
245 tctccctcct gggctcaagc gatcctcctg ccttgacctc ccaaagtgt gggattacag 3300
247 gtgtgagcca cgtgcccc cctatagggt tttaaacagt aaaaggagcc tagtgaagta 3360
249 cgacttaccg caggcaccct ttacaggccc cggggggacc ctttctgcc gatcccagg 3420
251 tacagctgtg acaccgtctt ttctgcctgg attatccag tagataaaca aaaattagag 3480
253 atcgtcattc catttctctc tgtatatatt ttccaagcc ctttctatga atgatcagtt 3540
255 atttctgca ctgattttt ttttttttt ttttttttga gacggagtct cactctgtca 3600
257 cccaggctgg agtgcatgg catgatctcg gctcgtgca agctctgct cccgggttca 3660
259 agcgattctt ctgccttagc ctcccagta gctgggacta caggagagta ccatcatgcc 3720
261 cggttaattt ttgtatttt agtagagaca ggctttcacc atattggcca ggctggtctc 3780
263 gaactccgga ccttgccatc tgctgcctt ggctcccaa agtgctggga ttacaggcgt 3840
265 gagccaccgc gcttgccct cctgcactga tataaaaaga atttttttaa attctctatt 3900
267 tctccccact cccaccccca ggctcactcc ttataaagca gcctctagcc tcatctgccc 3960
269 ctctacacc acaccaactc gagggcccg aattgggtct ggggcagtcg ctgacttgc 4020
271 tgcttctctg cctgtctctt ggggttagcc tcaggggcag ggttgagagt caggcttggc 4080
273 caggcagcag aggtccaga cagcgaagca gaatccttc gagataccag gagaggcgc 4140
275 atctgcctt ttctgtttc agattaggtt ttgttgtgt tgttttgtt ttttctctc 4200
277 cctctctccc tccctccctc tctccctccc tctctccctc tctcgtccc tccctctctc 4260
279 tctctctccc cctccctcct tccctccctc ccatccctgc agcgtaccc gggactctg 4320
281 gatgcacata gggcggtct cgtcctacc ttgtcatct gctgtctaat ccgggggcag 4380
283 cttccctcct ccacaccagc agaggctatt cttcagcaac aagaatagcc gaggctattc 4440
285 gtccgcaaca agagcccaag aagcatcctg caggctttct gctttttgag tgtattttaa 4500
287 agcaaaaacg agtggaagc tatgtatgct cagttaacta tgtctagatg ttaacctttt 4560
289 ttcaaaaac acagatggag gcctccctcc gaggatgcct ggcattctcc tctttctgtg 4620
291 ggcggcagcg acccctgcg gctccagcct ccactacggg atctgcggga agacacggg 4680
293 aagacgaact ccgcacactg catttgatta atgatttatt ttgattaacg ccgtcacagt 4740
295 gacgccttag agcagtcctt gttcacccgg gtcccagcct cgaccccgca cggacagca 4800
297 ggttggttag ctggggcgcg acgcagaaa gaggaggggc ggggccttgg tcgggtggg 4860
299 tatggaatgg gcagggtgg ggggatgggc ggggtatgg atgggcggg cccgggaaat 4920
302 tccccggcg gggcaggag cggtggctg tcagctgagc cgcgctggg ggggtcgcca 4980
304 ggcgcgcgat cagccctagg caccacagtc ccggctgccc cctccgccac cgccgcgcg 5040

```

## RAW SEQUENCE LISTING

DATE: 03/20/2002

PATENT APPLICATION: US/10/091,281

TIME: 16:27:42

Input Set : A:\13587\_338.txt

Output Set: N:\CRF3\03202002\J091281.raw

306 cgccggcagg ttcc  
309 <210> SEQ ID NO: 2  
310 <211> LENGTH: 46951  
311 <212> TYPE: DNA  
312 <213> ORGANISM: Homo sapiens  
314 <220> FEATURE:  
315 <221> NAME/KEY: allele  
316 <222> LOCATION: 391  
317 <223> OTHER INFORMATION: single nucleotide polymorphism (SNP)  
319 <220> FEATURE:  
320 <221> NAME/KEY: allele  
321 <222> LOCATION: 691  
322 <223> OTHER INFORMATION: single nucleotide polymorphism (SNP)  
324 <220> FEATURE:  
325 <221> NAME/KEY: allele  
326 <222> LOCATION: 709  
327 <223> OTHER INFORMATION: single nucleotide polymorphism (SNP)  
329 <220> FEATURE:  
330 <221> NAME/KEY: allele  
331 <222> LOCATION: 887  
332 <223> OTHER INFORMATION: single nucleotide polymorphism (SNP)  
334 <220> FEATURE:  
335 <221> NAME/KEY: allele  
336 <222> LOCATION: 894  
337 <223> OTHER INFORMATION: single nucleotide polymorphism (SNP)  
339 <220> FEATURE:  
340 <221> NAME/KEY: allele  
341 <222> LOCATION: 987  
342 <223> OTHER INFORMATION: single nucleotide polymorphism (SNP)  
344 <220> FEATURE:  
345 <221> NAME/KEY: allele  
346 <222> LOCATION: 1112  
347 <223> OTHER INFORMATION: single nucleotide polymorphism (SNP)  
349 <220> FEATURE:  
350 <221> NAME/KEY: allele  
351 <222> LOCATION: 1505  
352 <223> OTHER INFORMATION: insertion of additional c residue  
354 <220> FEATURE:  
355 <221> NAME/KEY: allele  
356 <222> LOCATION: 1606  
357 <223> OTHER INFORMATION: single nucleotide polymorphism (SNP)  
359 <220> FEATURE:  
360 <221> NAME/KEY: allele  
361 <222> LOCATION: 2405  
362 <223> OTHER INFORMATION: single nucleotide polymorphism (SNP)  
364 <220> FEATURE:  
365 <221> NAME/KEY: allele  
366 <222> LOCATION: 2606  
367 <223> OTHER INFORMATION: single nucleotide polymorphism (SNP)

5054

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/091,281

DATE: 03/20/2002

TIME: 16:27:43

Input Set : A:\13587\_338.txt

Output Set: N:\CRF3\03202002\J091281.raw

L:11 M:270 C: Current Application Number differs, Replaced Current Application No

L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date